



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER
TECHNICAL REVIEW FORM**

**FIRM CAPACITY AND WATER ALLOCATION ANALYSIS
(N.J.A.C. 7:10- 11.5(e))**

_____ Water Purveyor

_____ PWSID#

_____ Municipality

System Source Capacity

Own Sources:

List all of the water system's existing sources of water with their pumping capacity and treatment capacity:

Wells or Surface Water Source	Pumping Capacity	Treatment Capacity	Limiting Capacity (smaller of pumping and treatment)
Totals (MGD)			

System Source/Treatment Capacity (sum of limiting capacities): _____

System Source/Treatment Firm Capacity (Source Capacity minus largest source or treatment component): _____

Interconnections

List all of the existing interconnections with current contracts:

<u>Supplier</u> (PWSID - PWS Name)	<u>Hydraulic Capacity</u> (MGD)	<u>Contract Type (Bulk, Emergency)</u>	<u>Contract Effective Date</u>	<u>Contract Expiration Date</u>	<u>Peak Day Contract Limit</u> (MGD)	<u>Peak Month Contract Limit</u> (MGM)	<u>Yearly Contract Limit</u> (MGY)

Total (Sum of all interconnections' capacity or contract limits, if applicable)= _____

Total System Firm Capacity (Source Firm Capacity plus interconnection total)= _____

System Demands

Average daily demand associated with this application as determined in accordance with N.J.A.C. 7:10-12.6 for non residential demands and N.J.A.C. 5:21-5.1 for residential demands:

Non-Residential Demand _____ MGD + Residential Demand _____ MGD = _____ MGD (value 1)

Previously Allocated Demands

List all of the permits that have a demand associated with them that have been already approved, but not yet constructed, or are currently under review with the Bureau:

<u>Permit Number</u>	<u>Average Residential Daily Demand</u>	<u>Average Non-Residential Daily Demand</u>	<u>Total Average Daily Demand</u>	<u>Permit Effective Date</u>	<u>Permit Expiration Date (3 years later)</u>
Subtotal (value a)					

Previously Allocated Average Daily Demand by the Public Water Supply System that did not require a Safe Drinking Water Permit: _____ MGD (value b)

Total previously allocated average daily demand: (a+b) _____ MGD (value 2)

Existing Peak Daily Demand

List the water system's historic demand for each month for the previous five years: (this should include water that was used from the system's own sources as well as water that was purchased from other systems)

	2000	2001	2002	2003	2004	2005
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
Peak (MGM)						
Total (MGY)						

Peak Daily demand (highest month in past five years divided by the number of days in that month) _____ MGD (value 3),
 Month _____, Year _____.

Peak Monthly Demand (highest month in the past five years)
 _____ MGM (value 4), Month _____, Year _____.

Peak Yearly Demand (highest yearly total in the past five years)
 _____ MGY (value 5), Year _____.

Total New Estimated Peak Daily Demand:

= (value 3) + 3x[(value 1) + (value 2)] = _____ + 3x [_____ + _____] = _____ MGD

The total system firm capacity must be greater than the total new estimated peak daily demand. If it isn't, the water system does not have the capacity to provide water for this permit application and **the application package will be returned.**

Water Allocation Analysis

The current allocation limits for the water system’s own sources:

SOURCE	Diversion Permit	gpm	MGD	MGM	MGY
TOTALS					

Total Limits: (total allocation limits + contract limits for interconnections)

_____ **MGD** _____ **MGM** _____ **MGY**

Anticipated future demands

Monthly (MGM)
= (value 4) + 31x1.5x[(value 1) + (value 2)]
= _____ + 46.5 x [_____ + _____] = _____ MGM

Yearly (MGY)
= (value 5) + 365x[(value 1) + (value 2)]
= _____ + 365 x [_____ + _____] = _____ MGY

The total monthly and yearly limits must be greater than the total anticipated future monthly and yearly demands. If they are not, the water system does not have adequate allocation rights/ contracted supply to provide water for this permit application and **the application package will be returned.**

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

Signature of Engineer
Professional Engineer’s Embossed Seal

Date

N.J.P.E. #

Type or Print Name of Engineering Firm